

UniDrive (LC-MS) QUICK START GUIDE

Single-Stage Oil-Sealed Rotary Vane Pump for LC-MS Systems
Models UDS55/UDS75



START-UP STEPS

1. Place the pump on a flat, level surface in a clean, dry, well-ventilated area. Leave 4–6 in. of clearance around the pump for cooling airflow.
2. Remove the oil fill cap on top. Slowly pour in the NAVAC vacuum oil until the level sits between the MIN and MAX marks on the sight glass. Replace the fill cap.
3. Connect the inlet to your vacuum system. Make sure the line is clean, leak-tight, and the system is not pressurized. Leave the exhaust open or routed to your exhaust line.
4. Set the gas ballast to the closed setting for normal operation. Use the open position only when pumping condensable vapors (water, solvents).
5. Plug the pump into a properly grounded outlet matching the voltage on the nameplate.
6. Verify the exhaust port is unobstructed. Switch the pump ON. The pump will start immediately.
7. Let it warm up for ~15 minutes, then re-check the oil level through the sight glass. Top up if below the MIN line. Engage Eco Mode once your system has reached working vacuum to reduce noise and energy use.

AT A GLANCE

SPEC	UDS Series
Power	220V 50/60 Hz Single Phase
Application	LC-MS foreline
Inlet/Exhaust	KF40/KF25
Oil	NAVAC NPO68
Oil Capacity	2.5 L
Cooling	Air-cooled
Noise	Low (lab-rated)
Ambient	10 to 40 °C
Communication	Rs485

⚠ *Optimized for LC-MS: compact footprint, reduced noise, single-phase operation. Always exhaust to a proper lab venting line.*

BEFORE YOU START — SAFETY

- Always vent exhaust to a fume hood or proper lab exhaust line — pumped vapors may contain solvents.
- Surfaces stay HOT during operation and for up to 1 hour after shutdown. Allow to cool before service.
- When pumping aqueous LC mobile phases, run with gas ballast open for 30+ min after each batch to remove water from the oil.
- Change the oil whenever it appears cloudy, dark, or contains visible water. Cloudy oil reduces ultimate vacuum.
- Do not pump flammable or explosive solvents without verifying compatibility with NAVAC technical support.

Need help?

NAVAC Technical Support: +1 877.MY.NAVAC Ext. 2 • techsupport@navacglobal.com • Full manual at navacvacuum.com
This Quick Start Guide is a summary. Always read the full User Manual before installation, operation, or service.
Note: This guide is a general start-up reference for the UDS series. Procedures and specifications are extrapolated from the UniDrive platform and the UDS spec sheet — always verify against the UDS-specific user manual.